

### **DETAILED ACTION**

1. In response to the Office action mailed on November 28, 2007 the Amendment has been received on February 25, 2008.

Claims 1, 9, 19 and 20 have been amended.

Claim 2 has been canceled.

Claims 1 and 3-20 are currently pending in this application.

### ***Allowable Subject Matter***

2. Claims 1 and 3-20 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowed because prior art fails to teach or make obvious a cooling system for use with an associated x-ray tube assembly comprising: an axial fan disposed to move the flow of air through the heat exchanger, the axial fan having fan blades with a size and shape to receive air flow along a path substantially parallel to an axis of rotation of the fan blades and to discharge air flow along a path substantially parallel to the axis of rotation of the fan blades; and an air flux director positioned to intercept the flow of air from the heat exchanger and to redirect the flow of air in a direction which is generally perpendicular to an axis of rotation of the fan as claimed in combination with all of the remaining limitations of the claim.

Claim 19 is allowed because prior art fails to teach or make obvious an x-ray tube assembly and cooling system comprising: a cooling system with an axial fan which is disposed to move a stream of air past a portion of the flow path, the fan having an axis of rotation, the fan being an axial fan having fan blades with a size and shape to receive air flow along a path substantially parallel to an axis of rotation of the fan blades and to discharge air flow along a path substantially parallel to the axis of rotation of the fan blades; and an air flux director axially spaced from the fan and shaped to radially deflect air exhausted by the fan as claimed in combination with all of the remaining limitations of the claim.

Claim 20 is allowed because prior art fails to teach or make obvious a method for cooling an x-ray tube assembly comprising: transferring heat between a cooling liquid and a flow of air generated by a fan, the fan exhausting the air flow in a direction generally parallel with its axis of rotation, the fan being an axial fan having fan blades with a size and shape to receive air flow along a path substantially parallel to an axis of rotation of the fan blades and to discharge air flow along a path substantially parallel to the axis of rotation of the fan blades; deflecting the exhausted air off of an air flux director in a radially outward direction which is generally perpendicular with the axial direction as claimed in combination with all of the remaining limitations of the claim.

Claims 3-18 are allowed by virtue of their dependence.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

4. Applicant's arguments, see pages 6-9, filed on February 25, 2008, with respect to claims 1 and 3-20 have been fully considered and are persuasive. The rejection of claims 1 and 3-20 has been withdrawn.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kendall (US Patent 5,956,383) and Rodewald (US Patent 4,634,342) teach using the fans to move the flow of air in the direction that is generally perpendicular to an axis of rotation of the fans.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IRAKLI KIKNADZE whose telephone number is (571)272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2882

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/Irakli Kiknadze/  
Irakli Kiknadze  
Primary Examiner  
Art Unit 2882

*/I.K./ April 11, 2008*